DIRECT TESTIMONY

OF

RUSSELL W. MURRAY

TELECOMMUNICATIONS DIVISION

ILLINOIS COMMERCE COMMISSION

MARSEILLES TELEPHONE EXCHANGE

DOCKET NO. 04-0365

July 14, 2004

1 Q. Please state your name and business address.

2

A. My name is Russell W. Murray and my business address is 527 East Capitol
 Avenue, Springfield, Illinois 62701.

5

6 Q. By whom are you employed and in what capacity?

7

8 A. I am employed by the Illinois Commerce Commission as a Utility Analyst in the
 9 Telecommunications Division.

10

11 Q. Please describe your professional background.

12

13 A. I am retired from GTE/Verizon after 30 years of service. I began my career with 14 GTE of Illinois in 1970 as a Central Office Equipment Installer in Belvidere, 15 Illinois. As an Equipment Installer I installed Electrical Mechanical switching 16 equipment, Special Service Equipment, and Transmission Equipment in GTE 17 Central Offices in Northern Illinois. In 1976, I became a Switching Technician in 18 New Milford, Illinois. In that capacity I conducted routine maintenance and repair 19 of Electrical Mechanical and the newer #2EAX electronic switches, as well as 20 maintenance and repair of various PABX switching equipment. I also worked on 21 customer related trouble. In 1984, I transferred from Belvidere, Illinois to 22 Bloomington, Illinois to work in the Switching Services Operations Center 23 (SSOC). There I provided technical support to the local Switching Technicians

who worked on the #2EAX and GTD5 electronic switches. I also assisted the local technicians in performing the software upgrades called System Version Releases (SVRs). The SSOC not only provided first line support but also was the alarm-monitoring center as well as call out center for Illinois during off hours. SSOC personnel, of which I was one, were on call seven days per week, twenty four hours per day.

In 1987, I become an Instructor for GTE North, located in Bloomington, Illinois. In that capacity, I instructed Management and Craft personnel on various technical and operational characteristics of the GTD5 electronic switch. In 1990, I returned to the Technical Support group. Again, I was responsible for providing technical support not only to the Local Technicians but also to the group's own Support Technicians. I also provided technical support and undertook Test Engineering functions for the GTE's Equipment Installation group. In addition, I was responsible for undertaking office conversions on several 5ESS switches throughout Illinois. I helped develop and train the Local Technicians on ADSL Testing in GTE North and provided technical support for the ATM network. Further, I have worked on Local Number Portability (LNP) and helped to develop the Fiber Restoration Procedures for GTE North.

47 Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to address the technical aspects associated with porting a telephone number from a wireline carrier to a wireless carrier.

52 Q. Have you reviewed the testimony of Marseilles Telephone Company
53 ("Marseilles") witness Jason Hendricks?

55 A. Yes.

Q. Has Marseilles raised any concerns regarding its ability to port a telephone number to a wireless carrier?

A. Yes. Mr. Hendricks identifies two ways for Marseilles to deliver a call made by one of its subscribers to a former Marseilles subscriber who has ported his telephone number to a wireless carrier. First, according to Mr. Hendricks, Marseilles can technically deliver ported calls to wireless carriers' points of interconnection at the tandem in an exchange of another local exchange carrier. Mr. Hendricks, however, asserts such calls are interexchange calls because Marseilles must route the calls out of its local service area to the tandem in an exchange of another local exchange carrier. Mr. Hendricks further asserts that Marseilles lacks authority to deliver such calls under state law because it lacks a

¹ Marseilles Ex. 1.0 (Hendricks Direct), at 15.

certificate of interexchange authority.³ Second, according to Mr. Hendricks, "the only other technical way for a wireless-to-wireline LNP call to be completed is for Marseilles to route the call to the customer's presubscribed interexchange carrier, which would result in the customer being charged for a toll call."⁴

73

74

75

69

70

71

72

- Q. Do you agree with Mr. Hendricks' assessment of the handling of a wireline to a ported wireless call?
- 76 **A.** No.

77

78 Q. What is your understanding of the way the call will be handled?

79

80

81

82

83

- A. As I have previously testified to in the Alhambra-Grantfork Docket (03-0732), my understanding of how a call from a Marseilles wireline subscriber to a former Marseilles customer who has ported his or her telephone number to a wireless subscriber is handled is as follows:
- 1. If Marseilles ports a number to a wireless carrier, that ported customer keeps his or her Marseilles NPA-NXX⁵ but the number is assigned to the wireless carrier.

² <u>Id</u>.

³ <u>Id</u>.

⁴ <u>Id.</u> at 16.

⁵ The Numbering Plan Area or "NPA" is commonly known as the area code. It refers to the first three of a ten-digit telephone number (NPA-NXXX-XXXX). An NXX code refers to the second three digits, where N represents any one of the numbers 2 through 9 and X represents any one of the numbers 0 through 9. See 47 C.F.R. § 52.7(c). It is assigned to a specific rate center for the purpose of identifying the rate center for routing and rating purposes.

- 2. When a Marseilles wireline subscriber calls the ported number of the wireless subscriber, the Marseilles Northern Telecom (Nortel) DMS-10 switch recognizes that the number has been ported.
- 3. The Marseilles DMS-10 switch performs an SS7 (Signaling System 7) query to determine where and how to route the call.
- 4. The SS7 look up table tells the Marseilles DMS-10 switch to route the call to the common final trunk group connected to the tandem switch. The tandem then routes the call to the wireless carrier's trunk group.
- 5. The Marseilles DMS-10 switch uses its routing and billing tables associated with the NPA-NXX to determine that the call is a local call. Also, note that when a Marseilles wireline subscriber calls a wireless subscriber (with an NXX code assigned to a rate center outside of the Marseilles rate center), that call is a toll call. Thus, calls to foreign NXX codes (i.e. those telephone numbers with an NXX not assigned to the Marseilles rate center) will continue to be toll calls.

Q. Does that mean Mr. Hendricks is incorrect in his assumptions regarding toll billing?

A. Not necessarily. It only means my understanding of the situation and my past experience do not support Mr. Hendricks' concern over toll billing to a ported local NPA-NXX. If Mr. Hendricks provides specific examples and explains how the process is different from my understanding, I will consider that information and reevaluate my conclusion.

110

111

112 Q. Do you believe that it is technically feasible for Marseilles to implement 113 wireline to wireless LNP?

114

115

116

117

118

119

120

A. Yes. In fact, Mr. Hendricks identifies two ways for delivering calls from its subscribers to customers who have ported their numbers to wireless carriers. The first way requires the delivery of ported calls to wireless carriers' points of interconnection at the tandem. This solution requires Marseilles to use a trunk group that would interconnect to the wireless carrier at the point of interconnection at the tandem. This is a feasible solution.

121

122 Q. What is the second way Mr. Hendricks has identified for completing a

123 ported call to a wireless carrier?

124

125 A. According to Mr. Hendricks, the second way is to route the call to the calling 126 customer's presubscribed interexchange carrier, which would result in the 127 customer being charged for a toll call.⁷

128

129

130

Q. Do you have any concerns with this type of technically feasible solution identified by Mr. Hendricks?

131

⁶ Marseilles Ex. 1.0 (Hendricks Direct), at 15.

132 Α. Yes. I do not believe that a call between two numbers within the same exchange 133 is an interexchange call. Therefore, routing of such a call to an interexchange 134 carrier in which a customer would be charged for a toll call is improper. 135 136 Q. Can you summarize the way that it is technically feasible to complete a call 137 from a wireline customer to a ported wireless customer? 138 139 Marseilles can deliver such calls on its existing switched trunks to the Α. 140 tandem switch for delivery to the wireless carrier. Alternatively, Marseilles can 141 establish direct, non-switched trunks from Marseilles to the wireless carrier. 142 143 Q. Mr. Hendricks claims that the FCC has required Marseilles to provide a service that it lacks authority provide. Do you agree? 144 145 No. Although I am not an attorney, I do not believe that implementing wireline-to-Α. 146 wireless LNP as I have described requires Marseilles to provide an 147 interexchange service that it lacks authority to provide. A call between two 148 numbers within the same exchange, regardless of how it is routed, is a local call. 149 150 Q. Does this conclude your testimony? 151 152 Yes. Α.

⁷ Id. at 16.